

FEDERAL EMS UPDATE

NATIONAL ENERGY TECHNOLOGY LABORATORY

Letter From the Publisher

Dear Colleague:

Since its creation in 1977, the U.S. Department of Energy (DOE) has developed numerous technologies, applications and innovations that have made substantial contributions to the future of our nation. The DOE and the National Energy Technology Laboratory (NETL) are working to overcome these new challenges and help the Department meet its mission to support continued leadership in the environmental community.

One of the ways NETL is meeting these challenges is through the Center for Acquisition and Business Excellence (CABE), an independent federal consulting group created in 1997 as a Center of Excellence. As a leader in solving energy and environmental problems, CABE's mission is to provide a suite of proven program and project management skills, engineering skills, systems analysis capability, administrative skills, innovative contracting expertise and environmental management capabilities to federal agencies.

It is our hope that this publication, and others to follow, will bring you greater understanding and appreciation of Environmental Management Systems (EMSs) and how they can benefit your organizations. This publication will provide quarterly updates regarding EMSs and their progress and impact on federal, state, and local government stakeholders. It will also serve as an information resource on where to obtain valuable EMS information for your government facilities.

Sincerely,
Susann M. Schreiber
ISO 14000 Services

CABE – Your one-stop source for ISO 14000 Management Services

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Let the CABE work for you



Clinton Signs Executive Order for EMSs

The Clinton Administration recently (April 2000) capitalized on the surge of environmental interest, using the 30th anniversary of Earth Day to announce two new executive orders that officials hope will improve the environment in the future.

The orders are the latest of a Greening the Government series and will set a course for the federal government to improve environmental performance. Their purpose is to provide structure through better environmental management, stronger compliance and improved communication efforts with public right-to-know initiatives. The mandates also require federal agencies to achieve reduction in toxic chemical release, the use of toxic chemicals, hazardous substances and other pollutants, and places new petroleum consumption restrictions on agencies that operate 20 or more motor vehicles within the U.S. The two orders are:

- Greening the Government Through Leadership in Environmental Management
- Greening the Government Through Federal Fleet and Transportation Efficiency

The new orders, particularly the one requiring environmental management systems (EMSs) for more than 15,000 federal facilities, will set unprecedented requirements for at least 27 federal agencies. In addition, the mandates likely will affect a number of peripheral agencies, such as the Tennessee Valley Authority, the Government Printing Office, and the U.S. Postal Service.

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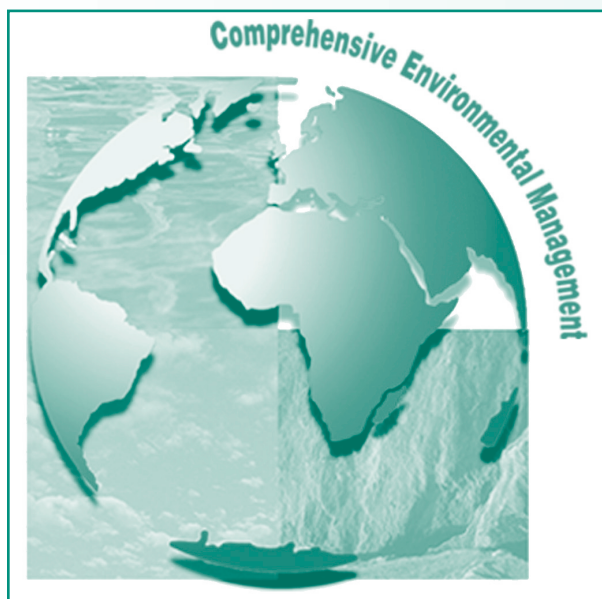
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ISO 14001 Certification for Strategic Petroleum Reserve

In May 2000, the Strategic Petroleum Reserve (SPR), through its management and operating contractor, DynMcDermott Petroleum Operations, Inc., became the first DOE office within the Office of Fossil Energy and the fifth Department-wide facility to receive ISO 14001 certification for its EMS. This multi-site certification (for SPR sites in New Orleans and 4 oil storage sites in Freeport and Winnie, TX, and Sulphur and Plaquemine, LA) is the first certification of any U.S. organization, public or private, in the bulk petroleum storage classification (5171 SIC code). Only four other companies in Louisiana, 34 in Texas, and 623 in the entire U.S. (including all categories of business) have received this prestigious certification. The registrar that conducted the certification audit was Advanced Waste Management of Hixson, TN.

Dr. Brent Smith, DOE Strategic Petroleum Reserve Project Management Office Customer Focus Advocate, recently was certified as an ISO 14001 EMS Auditor by the Registration Accreditation Board (RAB), becoming possibly the first Certified DOE EMS Auditor nationwide. ■



News Flash...

LLD Achieves EMS Registrar Accreditation

HERNDON, VA – Lloyd Lamont Design, Inc. (LLD) has announced that the company has achieved EMS Registrar accreditation. The RAB – the U.S. body that accredits Quality and EMS registrars and course providers – approved LLD's accreditation on September 6, 2000.

LLD, a certified small disadvantaged business (SDB), is a multi-faceted organization committed to the development and application of new technologies and innovations in the public and private sectors. LLD is constantly maintaining the lead in providing modern technology services onward into the 21st Century. ■

Additional information about LLD's EMS Registrar capabilities can be obtained by visiting the web site at <http://www.lld.com>.

EMS Tools: What and Where?

(Note: Future section introduces the reader to web sites that host ISO 14000 EMS free tools for implementation activities. All readers are encouraged to send in site references to tools they develop or find in their searches.)

What Is ISO 14000?

ISO 14000 is a group of voluntary international standards addressing environmental management systems, environmental auditing, environmental labeling, environmental performance evaluation, and life cycle assessment. The standards were developed by the International Organization for Standardization (ISO) and are commonly referred to as the ISO 14000 series. The series provides an organization with a systematic approach to environmental management. ■

For more information on the ISO 14000 series of standards, please go to its web site at: <http://www.iso.ch/>.

Clinton Signs Executive Order for EMSs

(continued from page 1)

At present, it's difficult for government officials to determine the exact number of facilities and employees that the order's reform will affect. The order requires that all agencies having facilities affected by environmental regulations implement an EMS.

The U.S. Environmental Protection Agency (EPA) stated that the administration established the need for such an order after noting environmental performance improvements through a number of pilot projects in larger agencies, such as the Department of Defense, DOE, and NASA. Those agencies have been using ISO 14001 and the EPA's Code of Environmental Management Principles (CEMP).

Additionally, EPA has been doing EMS reviews in federal facilities for years, performing reviews in facilities such as laboratories, federal buildings and wildlife refuges to examine certain sections or all parts of a facility's management system to find out what was working and what was not concerning EMS practices. EPA's findings were enough to encourage all federal facilities to adopt EMSs for the future.

Mandate Highlights

The executive order (#13148) on EMS will cause sweeping reform throughout the federal government. Below are some of the highlights that will affect all agencies as well as many government suppliers in the coming months:

- Each agency shall reduce its reported Toxic Release Inventory releases and off-site transfers of toxic chemicals for treatment and disposal by 10 percent annually, or by 40 percent overall by December 31, 2006.
- Each agency shall reduce its use of selected toxic chemicals, hazardous substances and pollutants, or its generation of hazardous and radioactive waste types at its facilities by 50 percent by December 31, 2006.
- Each agency shall strive to promote the sustainable management of federal facility lands.
- Each agency with facilities shall establish a pilot program to apply life-cycle assessment and environmental cost accounting principles.
- Each agency shall ensure that its environmental regulatory compliance funding policies promote the

use of pollution prevention to achieve and maintain environmental compliance at the agency's facilities.

- Each agency shall prepare directives, policies and documents to reflect the nature, scale and environmental impact of the agency's activities, products or services.
- Within 18 months of the date of the order, each agency shall conduct an agency-level EMS self-assessment based on ISO 14000, EPA's CEMP and/or another appropriate environmental management system framework.
- Within 24 months of the date of the order, each agency shall implement EMSs through pilot projects at selected agency facilities. The facility EMS shall include measurable environmental goals and objectives and targets that are reviewed and updated annually.



To ensure that government goals for pollution prevention are advanced, each agency is encouraged to incorporate its environmental leadership goals into its Strategic and Annual Performance Plans required by the Government Performance and Results Act of 1993. ■

For reprints of this article, please visit: <http://www.ceem.com/>.

To view the Executive Order, visit the following Web Page: <http://www.denix.osd.mil/denix/Public/Legislation/EO/note72.html>.

Municipalities Wrap Up EMS Pilot

"It works!" That was the overwhelming response from the participants of the U.S. EPA's Municipal EMS Implementation Initiative.

Sponsored by the EPA's Office of Wastewater Management and Office of Compliance, the project finale was held at the Bar Association of New York City on July 14 -15, 1999. The fifth and final workshop, conducted by the Global Environment & Technology Foundation, was the culminating event of the two-year project to implement an ISO 14001 EMS for six municipalities, one city transit system, one county, and a state prison facility.

Participant	Organization
Town of Londonderry, NH	Public Works
City of Lowell, MA	Wastewater Treatment Facility
Wayne County, MI	Wastewater Treatment Facility
City of Indianapolis, IN	Public Works
Massachusetts Corrections Institute - Norfolk	Industries/Power Plant/WWTP
City of Gaithersburg, MD	Public Works
Lansing Board of Water & Light, MI	Electric Generating Facility
City of Scottsdale, AZ	Municipal Government
New York, NY	Transit Authority/Capital Project Management

Each of the nine participating U.S. municipalities completed the project at different stages. Some are looking to become certified by a third-party registrar, others have not fully implemented an EMS. Only one, the New York City Transit Capital Program Management, achieved certification to ISO 14001. The project participants reported that the project was challenging and difficult to implement, but that they believe their organizations are better off today than when they started. They cited improved internal communication, cost savings, increased efficiency, better management and a new relationship with state and federal regulators as some of the benefits realized. As the first public organizations to implement an ISO 14001 EMS they believe their "lessons learned" will make it easier for other public organizations that want to follow in their footsteps.

The City of Scottsdale, AZ, chose to implement its EMS city-wide within each of its 15 departments. Analyzing its compliance issues, the EMS core team unveiled an opportunity for cost savings. Each department was responsible for obtaining

its own air quality permits – 23 total, including associated fees. The Environmental Management Department consolidated the air quality permits into eight, reducing paperwork and saving the city \$16,000 a year in permit fees. Officials from the City of Lowell, MA also reported cost savings of \$7,400 over a ten-month period due to energy reduction strategies implemented throughout its Wastewater Treatment Facility.

Three of the participants cited improved relations with state and federal regulators as a driver and benefit to implement the EMS. The Massachusetts Corrections Institute at Norfolk (MCI-Norfolk) was historically a facility that struggled with compliance issues. Management saw the EMS as a tool that would help them address these issues. MCI-Norfolk's efforts caught the attention of the Massachusetts Department of Environmental Protection (DEP), the state's regulatory agency. MCI-Norfolk's EMS activities signaled to the DEP that they are taking a proactive approach to address their compliance issues. In response, MCI-Norfolk believes the state has given it much more latitude, is quicker to provide technical support, and has been generally more supportive.

As with any new initiative there is always something that could have been done differently. Many of the participants said had they known then what they know now (about EMSs), the implementation process would have been much smoother. Given the opportunity to start over, the participants said they would ensure the EMS team is crossfunctional and that they would secure top management commitment prior to beginning the project.

Participants agreed that although many aspects of the project were difficult to overcome, three issues rose to the highest level of importance: compliance to applicable environmental laws, improved public image and improved community relations. After seeing the results of the pilot project, EPA is getting more comfortable with moving from its traditional role as command-and-control regulators toward involvement in the end of EMSs.

An EPA-appointed task force recently was charged with writing a report that will look at promoting EMSs, selecting from different types of EMSs and implementing them in the best possible way, said George Wyeth, senior counsel of EPA's Office of Policy and Reinvention.

Wyeth stressed that EPA has no intention of enforcing or mandating a specific kind of EMS. Rather, the report will merely make recommendations. ■

For more information on the municipalities EMS pilot project and for reprints of this article, visit <http://www.getf.org/projects/muni.cfm>.

FEDERAL FIELD NOTES

The **U.S. Agency for International Development (AID)** will conduct a pilot program for public-sector organizations along the U.S.-Mexican border this year. The pilot should provide valuable insight into the steps necessary to implement an EMS within organizations with extremely strained resources.

The **North American Free Trade Agreement (NAFTA)**, Commission for Environmental Cooperation (CEC) releases a compliance-focused EMS guide. The guide has ten key elements that companies would have to achieve in order to receive regulatory flexibility from governments in Canada, Mexico, and the U.S.

SRS Annual ISO 14000 EMS Audit

Savannah River Site (SRS) is one of the first DOE sites to become registered to the ISO 14001 EMS standard in the DOE complex. KEMA Registered Quality completed its annual three-day audit to monitor continued performance with ISO 14001 standard. SRS was first registered by KEMA in September of 1997. For more information on the SRS EMS go to <http://www.srs.gov>.

Federal Managers Seek to Trim Energy Costs

Federal energy managers gathered in Pittsburgh recently to identify energy and water efficient products that will save the government money and protect the environment.

The Energy 2000 conference, sponsored by the Department of Energy's Federal Energy Management Program (FEMP), was held last week in Pittsburgh, PA and included energy management professionals from the federal sector and private industry.

FEMP seeks to reduce pollution and increase energy and water efficiency at federal facilities. Under Executive Order 13123, issued by President Clinton in 1999, the federal government must reduce its energy consumption by 30 percent from 1985 levels by 2005 and by 35 percent by 2010.

In April, DOE Secretary Bill Richardson announced that the federal government has reduced energy use in its buildings by 20 percent since 1985, one year ahead of schedule. The energy savings are calculated using fiscal year 1999 data from the 30 largest federal agencies.

Government buildings account for one half of the government's total energy cost, which adds up to about \$8 billion annually. The U.S. Department of Defense (DoD) is the largest single energy user in the nation, spending over \$6 billion on energy in fiscal year 1998.

For a complete reprint of this article, visit <http://www.govexec.com/dailyfed/0800/082500m1.htm>.

The **U.S. Postal Service (USPS)** plans to deliver its part of environmental management improvements in the months ahead, and may decide to roll out ISO 14001 programs nationwide in the near future.

Dennis Bacca, USPS's environmental manager of policy, reported that the USPS already had plans to continue its ISO 14001 efforts before Executive Order 13148 was issued. The USPS plans to implement its program in its environmental policy office in Washington, D.C.

"We will also be using some components of ISO 9000 and our Customer Perfect program, so that all of our efforts are compatible. And ISO helps give us that harmony," Bacca said. Bacca added that once the program gets off the ground in Washington, the USPS plans to implement ISO 14001 to the operational levels once they "demonstrate success."

"One thing that I've found over the past few years is that federal agencies are much further along than most people give them credit for, in terms of management systems," Bacca said. "But I believe it's going to really help the postal service and all federal facilities with their environmental efforts. It's going to be interesting to see it all happen." ■

For a summary of the USPS efforts, visit <http://www.iso14000.net>.

National Park Service

CEMP Study, Work Group Help Hone Environmental Initiatives

National Park Service (NPS) officials are working to make the NPS a leader in environmental management. "We do believe the National Park Service should be a leader in the environmental management arena in that we should be a place where people can go to see the newest, best sustainable and green compliance practices and the best technologies," said Shawn Norton, NPS environmental leadership program coordinator.

The NPS's involvement in environmental management was brought about by two initiatives. The first initiative was an environmental leadership work group that met in Washington, D.C. The work group discussed what environmental leadership meant to the NPS and worked on developing a plan for implementing it. The second initiative involved the EPA. The EPA expressed interest in the NPS participating in a study using the CEMP.

The CEMP study, which ran from July 1998 to December 1998, was conducted in two phases. Phase I was an organizational, structural study to help investigators get a handle on the NPS and its system. Phase II of the study involved analyzing the NPS EMS using the CEMP.

Findings

Recommendations from the NPS study included:

- Coordination of its environmental compliance efforts
- Provision of adequate resources, such as training, structural supports, and information management and communication
- Delegation of authority and responsibility of environmental compliance to NPS mid-level and facility-level staff. ■

For more information, contact Shawn Norton at 202-565-1260. For a complete reprint of this article, visit <http://www.ceem.com/iesunonsubscribers.htm>.

NASA Pilot Study

In November 1998, a pilot study was conducted on the applicability of EMS in the National Aeronautics and Space Administration (NASA). The study is titled "Environmental Management Division ISO 14000 Business Case" and examines the question of whether or not NASA should consider implementing an ISO 14001 EMS on an agency-wide basis.

An ISO 14001 gap analysis was performed at each NASA Center and Component Facility. These analyses were performed to ascertain the compatibility of current management processes with ISO 14001 standards. During the gap analyses, it became clear that NASA has had excellent environmental management controls in place for several years. The study recommended that NASA should adopt ISO 14001 as the EMS of choice. ■

For more information on the NASA study, contact James Smith of MEGA-TECH, Inc., at: 703-534-1629 or jlsmith-1@mgtech-world.com.



Air Force's ESOH Program to Use ISO 14001 EMS Standard as a Model

At the 5th Annual Joint Services Pollution Prevention and Hazardous Waste Management Conference & Exhibition (August 21-24, 2000) in San Antonio, TX, the Air Force unveiled its intention to implement an "ISO-like" Environment, Safety and Occupational Health (ESOH) program. At the annual conference this year guest speaker Thomas McCall, Deputy Assistant Secretary of the Air Force for ESOH, emphasizes the Air Force commitment to meet the Executive Order 13148 "Greening the Government Through Leadership in Environmental Management" with an AF ESOH program based on the ISO 14001 Environmental Management Standard. Lt. Col. John Coho co-moderated the session "Environmental Management System" which addressed the views of DoD and the Air Force on the different use of CEMP or ISO as the base platform for an EMS. Lt. Col. Coho's presentation "Air Force ESOH Management System Initiative" gave an overview of the proposed Air Force ESOH "ISO-like" management system. The Air Force's intent is to use the management structure of the ISO EMS and strengthen it with emphases in the areas of regulatory compliance, pollution prevention, and public outreach.

The Annual Joint Services Pollution Prevention and Hazardous Waste Management Conference and Exhibition is the largest conference of its kind dedicated to the preservation and improvement of the environment through investment in pollution prevention and proactive management of hazardous waste. The conference provides a forum for technical interchange of information on new technologies, processes, success stories, and tools. Sponsored by DoD and hosted by the United States Navy in 2000, the conference brings together environmental professionals from the military services, the federal government, and private industry to share ideas, information, and strategies to achieve these shared goals. ■

For more information on this initiative, visit <http://www.p2-hmconference.com/> or contact Lt. Col. John Coho at john.coho@pentagon.af.mil.

STATE FIELD NOTES

ARIZONA

Bold, New Arizona Legislation Puts EMSs, Incentives to the Test

Arizona enacted an environmental reform law recently involving EMSs, creating a voluntary two-tier system that accepts imperfect firms on a compliance track and offers incentives to promote superior environmental performance.

The new legislation is “within the box” concerning its menu of incentives, meaning all are authorized under federal law. But what makes the law nationally significant is its blending and linking of incentives, tiers, EMSs, contracts, duty-based liability, public reporting and encouragement of environmental concepts, such as design for environment and industrial ecology.

Incentives for participating in the program include recognition, preferred vendor status for state contracts, self-policing, faster permit review cycle time, consolidated permitting, as well as simplified and reduced monitoring and reporting. ■

For more information, call the Arizona Department of Environmental Quality at 602-207-4500. For a complete reprint of this article, visit <http://www.iso14000.net>.

COLORADO

The State of Colorado recently passed legislation that gives purchasing preference to companies that qualify under their Environmental Leadership Act. To participate in the program, an organization must have an EMS in place, and have a good record of environmental compliance with no serious environmental violations during the past three years.

Additional requirements of the program include:

- Conducting self-audits to ensure participating companies remain in compliance with applicable requirements
- Maintaining a pollution prevention program with specific goals of reducing releases of pollutants or the use of resources beyond reductions required by law
- Having verifiable, quantitative and qualitative measures or methods that document compliance with environmental requirements, resource conservation goals, and pollution prevention performance goals

Colorado is also providing a variety of incentives for companies participating in the program. The incentives include, but are not limited to:

- Potential economic benefits from being granted State of Colorado “Preferred Vendor” status
- Greater reliance by the Colorado Department of Public Health and the Environment (CDPHE) on the organization’s self-monitoring, self-reporting, self-certification, or third-party certification to demonstrate compliance with environmental laws and permits, which may result in fewer inspections
- Accelerated review and processing of environmental permit applications and consolidation of permit applications for each facility within the organization with a single representative of CDPHE ■

To learn more about Colorado’s program, visit <http://www.cdphe.state.co.us>.

OREGON

Oregon Governor Issues Executive Order for Sustainability

Oregon Governor John A. Kitzhaber signed a groundbreaking executive order on May 17, 2000, that experts say will make conversation about sustainability a legitimate goal across the state. The new order will help develop a statewide strategy to promote sustainability in internal state government operations in its first phase, and will level the playing field when it comes to enforcement expectations with the private sector.

The Oregon order takes the governmental directive to a new level by incorporating sustainable practices that will include economic and social goals, as well as environmental initiatives for all government facilities. ■

For more information on Oregon’s executive order for sustainability, visit <http://www.governor.state.or.us>.

For a complete reprint of this article, visit <http://www.ceem.com>.

VIRGINIA

Virginia Gets in the EMS Game

Virginia plans to join a growing number of states this month by implementing an Environmental Excellence Program that will promote EMSs and pollution prevention initiatives through recognition and the use of regulatory flexibility mechanisms.

The program hopes to improve the environmental performance of the state's 6,500 manufacturing facilities, as well as organizations in the high technology and service industries.

The Virginia Environmental Excellence Program will consist of two programs:

- Governor's Environmental Enterprise (E2): A program for facilities in the early stages of implementing an EMS.
- Governor's Exemplary Environmental Enterprise (E3): An accelerated program for facilities with a fully implemented EMS.

Both programs will involve typical approaches to environmental management, including setting an environmental policy, identifying environmental aspects and impacts and setting objectives and targets to address them. The E3 program will include the implementation of a formal EMS similar to ISO 14001 or other equivalent standards.

The Virginia DEQ plans to announce the Environmental Excellence Program formally in the weeks ahead. ■

For more information on the program, contact the DEQ at 804-698-4374.

For a complete reprint of this article, visit <http://www.iso14000.net>.

WISCONSIN

Wisconsin Electric Proposes Innovation in Environmental Management

In an effort to increase generation efficiency and recovery of energy while reducing potential impacts on the environment, Wisconsin Electric has filed a proposal with the Department of Natural Resources (DNR) under the Cooperative Environmental Agreement Program (CEA).

Authorized as a pilot program by the state legislature in 1997, the CEA Program seeks to identify alternate environmental regulatory approaches for Wisconsin companies. Wisconsin Electric would implement its proposal for five years at the Pleasant Prairie Power Plant, the largest electric generating plant in the state. As part of the agreement, Wisconsin Electric must demonstrate measurable improvements in environmental performance and report them to the DNR on an annual basis.

The complete text of Wisconsin Electric's filing can be found at <http://www.dnr.state.wi.us/org/caer/cea/ecpp/agreements/>. For additional information, visit <http://www.wisconsinelectric.com>.

Wisconsin's Paper Industry Gets Specific

Wisconsin's paper industry is moving beyond its successful pollution prevention program to a sector-specific EMS that envisions voluntary implementation in three years by all 24 companies.

Thomas H. Schmidt, president of the Wisconsin Paper Council (WPC), said the WPC-EMS is the next logical step for an industry that plans to "voluntarily operate its facilities beyond compliance and in the spirit of continuous environmental improvement."

The WPC EMS is designed to meet the ISO 14001 international standard and tailored to accommodate the diverse needs of Wisconsin's \$3.5 billion pulp and paper industry, which includes 42 facilities and 4.8 million tons of paper and more than one million tons of paperboard annually. WPC expects that some firms will use the WPC EMS as a prelude to ISO 14001 certification, while others will use it to enhance existing management systems. For more information, contact the Wisconsin Paper Council at 920-722-1500 or visit <http://www.wipapercouncil.org>.

Wisconsin Official Stresses Utility of EMSs

Wisconsin's top environmental regulator advised government leaders from all states and Canadian provinces to use systems approaches in their environmental policies. George E. Meyer, secretary of the Wisconsin DNR, told the Council of State Governments annual meeting that environmental management systems "make more sense" for good government, as well as economic and environmental reasons.

"Wisconsin likes EMSs because they offer structure for consultation, integration, prioritizing, documentation and continuous improvement," Meyer said in his speech to CSG's plenary session. "EMSs also can be third-party certified, which could augment regulators' efforts if certifiers are competent and honest."

Meyer believes that states need new tools like EMSs, environmental contracts and regulatory performance tiers to tackle interconnected 21st century issues. ■

For a complete reprint of any of the Wisconsin articles above, visit <http://www.iso14000.net>.



U.S. EPA Issues EMS Action Plan

Late last year, the EPA published its "state of the union" report on the use of EMSs. The draft report, titled "Action Plan for Promoting the Use of Environmental Management Systems," serves as both a progress report as well as a blueprint for the agency's future EMS activities.

The plan outlines the way the EPA will continue to support, and in some cases, directly fund, EMS implementation and registration projects for public-sector as well as private-sector organizations interested in implementing an EMS.

Additionally, EPA will coordinate all of its EMS activities through a central source, the New Office of Policy Economics and Innovation. ■

Information on the plan is available to any interested party at <http://www.epa.gov/ems>. For more information on the Action Plan or EPA's EMS activities, contact David Guest at 617-918-1814 or guest.david@epa.gov. For a complete reprint of this article, visit <http://www.iso14000.net>.

- Phase III: establishing environmental objectives and targets and management programs to achieve objectives; defining roles and responsibilities.
- Phase IV: monitoring established performance indicators to track progress toward achieving their objectives; ensuring proper checking and corrective action elements are in place such as internal audits and management review. ■

For more information on the Local Government EMS Initiative please contact: Craig Ruberti (cruberti@geff.org) at (703) 750-6401 or Faith Leavitt (fleavitt@earthvision.net) at (941) 489-1647 or visit: <http://www.geff.org/muni.htm>. For a complete reprint of this article, visit <http://www.geff.org/projects/emsrally.cfm>.

Local Governments Rally Round EMSs

Last April, EPA revealed a second EMS Pilot Project for Local Government. Representatives from 14 local government entities met in Scottsdale, AZ, for a three-day workshop featuring EMS awareness training, review sessions, and keynote addresses given by the project's organizers. Participants discussed their expectations from EMS, and those who had taken part in the first pilot project were encouraged to share their ideas.

Due to the first initiative's overwhelming success and local governments' growing interest in EMSs, the EPA saw the need for a second EMS initiative to test the results of the first, as well as gather additional data and incorporate lessons learned from the first pilot project.

The second EMS Pilot Project for Local Governments will include the following four phases:

- Phase I: collecting baseline data; training an EMS implementation team; securing top management involvement; establishing communication with external stakeholders; conducting a gap analysis; developing process maps for their "fenceline" operations.
- Phase II: implementing an environmental policy; identifying significant environmental aspects; developing procedures for identifying legal and other requirements.



DoD Pilot Study

As the third largest federal landowner and steward for tens of millions of acres of land, the DoD has a vast responsibility to protect the environment. Over the years, DoD has developed mature environmental programs that emphasize compliance, pollution prevention, and conservation. However, a DoD Inspector General (IG) report released shortly after the publication of ISO 14001 concluded that while DoD's traditional compliance-based environmental management programs had resulted in substantial improvements in environmental quality and human health and safety, the existing programs were not effective for assuring continuous improvements in environmental performance.

The IG report concluded that the DoD Components needed a more mature, quality-based EMS to improve their compliance posture, minimize compliance costs, decrease regulatory oversight, reduce or eliminate penalties, and more effectively demonstrate environmental achievements. Viewing the ISO 14001 EMS international standard as a potential opportunity to improve existing environmental programs by incorporating best practices being used by the private sector, DoD in 1997 began a voluntary two-year Pilot Study of the ISO 14001 EMS standard at 16 installations. The objectives of the DoD EMS Pilot Study were to investigate ISO 14001 in order to assess how it might be used in the military sector and to determine if its implementation would add value to the mature, but compliance-based, DoD Environmental Security program.

The extent of implementation of the standard varied across the Pilot Study installations. Several chose an incremental approach that focused on implementation within a single organization rather than across the entire installation. Some installations chose to seek certification to ISO 14001 EMS where they believed a business case supported such a decision, and several others chose to implement a tailored or generic EMS that incorporated select elements of the standard. A majority of the installations did not achieve full implementation of ISO 14001 within the two-year time period.

The Pilot Study installations generally had very strong environmental programs prior to implementing ISO 14001 EMS. Existing environmental programs contained strong compliance assurance elements, EMS implementation typically resulted in only limited compliance improvement but increased risk management through better record keeping practices, increased awareness by personnel (at all levels). Pollution prevention programs and project prioritization were improved and received increased attention from senior management. Most installations also reported that environ-

mental considerations were better integrated into decision-making processes as a result of the EMS process. Most sites report that greater benefits could likely be achieved at installations with weaker environmental programs.

Relationships with regulators were generally reported unchanged, although regulator reaction to ISO 14001 EMS implementation was generally positive. Installations reported difficulty assigning direct economic benefits solely attributable to EMS implementation. Consistent with the experiences of private sector organizations, the installations feel it will take several years before definitive economic benefits attributable to ISO 14001 EMS implementation become apparent. Based upon the experiences of those installations that made the greatest strides in achieving implementation, the cost of fully implementing an (quality based) EMS with elements similar to ISO 14001 ranged from \$375,000 to \$607,000.

The results of the Pilot Study indicate that all participating installations gained important insight into the strengths and weaknesses of their existing environmental programs from the experience. Lessons learned include the importance of strong senior management commitment to ISO 14001 EMS implementation, and that DoD installations already have many of the individual elements of the ISO 14001 EMS standard in place in their environmental programs. Most would recommend adoption of an EMS to other DoD installations, although the EMS does not necessarily have to be ISO 14001 EMS. The installations agreed that flexibility in determining the type and extent of EMS adoption is a key issue for consideration, and that it is the systematic management framework common to all EMSs that is their most important attribute, not their name or classification.

In addition to discussing the results of the Pilot Study, this report includes several appendices that discuss the extent of other Federal and state agency EMS initiatives, foreign government implementation of EMSs, and a summary of several private sector EMS initiatives. Evaluation of these other initiatives indicates that although there appears to be universal agreement that adoption and use of EMSs will be the next step in environmental management practices, there is no consensus that there is a single right type of EMS. ■

For more information on the DoD ISO 14001 EMS Pilot Study, visit <http://www.denix.osd.mil/denix/Public/Library/ISO14000/iso14000.html#three> or <http://www.lakehurst.navy.mil/envir/iso.htm>.

Environmentally Preferable Products and EMSs

Federal Mandate for Purchasing 'Green' Products and Services Links Customers, Suppliers

Designed to help federal agencies meet their obligations under Executive Order 13101 to identify and purchase environmentally preferable products and services, the EPA published its "Final Guidance on Environmentally Preferable Purchasing" (Guidance) in August of last year. EPA's guidance describes five key principles intended to drive agency procurement planning for EPP.

Some agencies already have undertaken pilot projects on EPP and more projects will be carried out in line with EPA's guidance. For example, the Department of the Interior is testing compostable food service plates and bowls in its Washington, D.C. headquarters cafeteria. In another pilot project, the NPS has selected plastic lumber guardrails, walkways and boardwalks for three of its parks. In this case, NPS considered plastic lumber to be environmentally preferable because it is made from post-consumer plastic and lasts longer than certain other materials.

Other agencies also are moving forward to implement EPP. DoD is employing EPP principles to ensure that ongoing routine renovations of its buildings and other facilities incorporate products that the department considers environmentally preferable. ■

For more information on EPP in the federal government, visit <http://www.epa.gov/opptinr/epp>.

For a complete reprint of this article, visit <http://www.iso14000.net>.

National Database on EMSs

The University of North Carolina-Chapel Hill (UNC) and the Environmental Law Institute (ELI) is making additional data about the benefits of EMSs available from the National Database on EMS (NDEMS).

Funded by the EPA and supported by the Multi-State Working Group (MSWG), the project is based on selected organizations completing a series of protocol questions during the three phases of EMS implementation: (1) pre-EMS performance, (2) EMS design, and (3) implementation and post-implementation.

The UNC/ELI research team publishes periodic public reports, as relevant data becomes available, that describe the progress of the NDEMS project. ■

The reports and other information about the effort are available at <http://www.eli.org/isopilots>.

NGO Report Examines Opportunities, Obstacles with Public Policy, EMSs

The Pacific Institute for Studies in Development, Environment and Security released a new report last month detailing the future issues surrounding the ISO 14001 standard and its potential role in U.S. public policy. The report, titled "Managing a Better Environment: Opportunities and Obstacles for ISO 14001 in Public Policy and Commerce," examines the EMS standard considering that U.S. environmental policy is in transition and that the existing regulatory system is approaching "the limits of its effectiveness."

The report states that while the ISO 14000 standards will not be mandated by international law, conformity to them may become a de facto requirement for doing business internationally.

The Pacific Institute is an independent, nonprofit center created in 1987 to conduct research and policy analysis in the areas of environment, sustainable development and international security. ■

For more information or to obtain a copy of the report, call 510 251-1600; Fax: 510 251-2203. For a complete reprint of this article, visit <http://www.iso14000.net>.

ACA Launches Alternative Accreditation Scheme

Beginning February 1, 2000, the American Council of Accreditors (ACA) will offer alternatives to current registrar accreditation methods in North America and parts of Asia. Citing "dissatisfaction" from current U.S. registrars and ISO certification bodies, the ACA will cover accreditation currently issued by programs such as the American National Standards Institute-Registrar Accreditation Board National Accreditation Program (ANSI-RAB NAP), the United Kingdom Accreditation Scheme (UKAS) and the Standards Council of Canada.

The new alternative scheme breaks new ground in the United States, as well as in many other parts of the world, regarding accreditation. According to ISO officials and the International Accreditation Forum, the only other country known to offer multiple accreditation methods is China, which offers three different systems of accreditation. ■

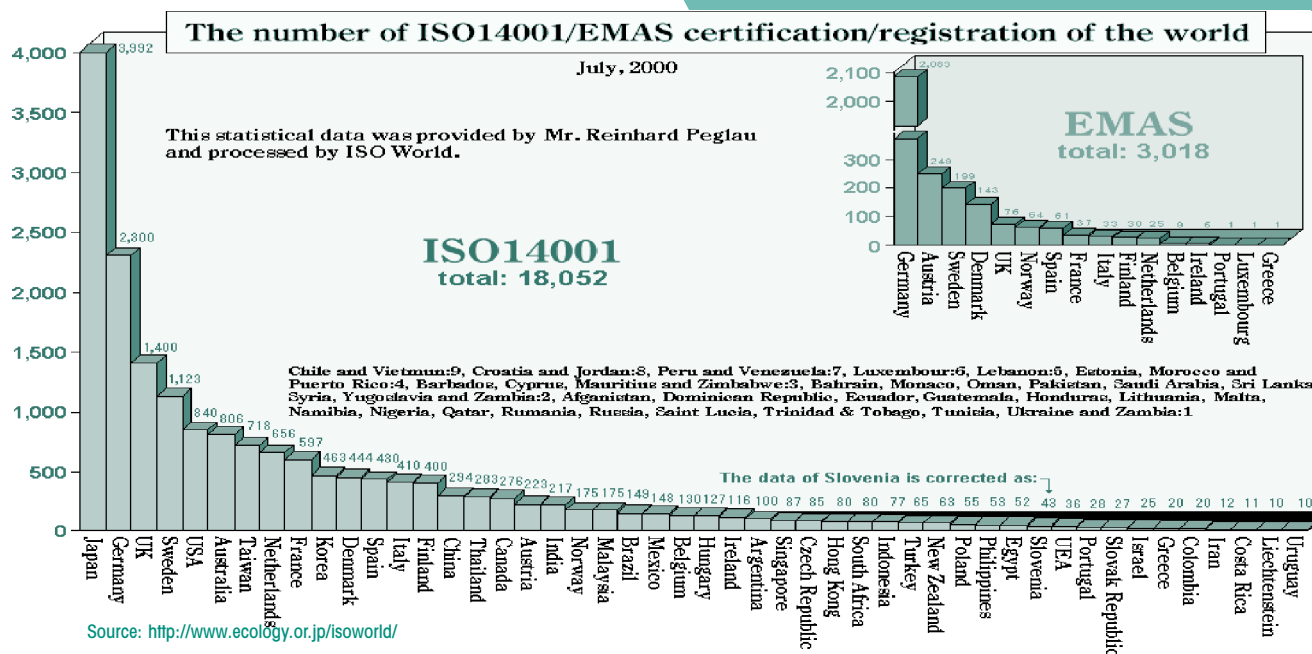
For a complete reprint of this article, visit <http://www.iso14000.net>.

READER CONTRIBUTION

In an effort to open the forum for government departments, agencies, and NGO organization NETL opens the EMS NEWSLETTER to its reader. NETL's commitment is to publish reader articles that present alternate views and approaches to the issues of EMS implementation and the results of those implementation. It is NETL's premise that sharing information in an open forum will stimulate effective implementation strategies and provide lessons learned from others' experiences.

IN THE NEXT ISSUE

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- Colorado Is Approved for EMS
- DoD's Approval of Executive Order 13148



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